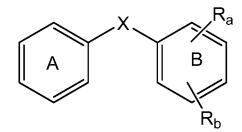
#### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

# **Listing of Claims:**

#### Claims 1-3 CANCELED

4. (previously presented) A compound comprising the structure of formula I: wherein:



- Ring A is optionally substituted with one to five substituents selected from
  - a) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy; or
  - b) a halogen or trihaloalkyl;
- Ring B comprises at least one structure denoted by  $R_a$  and  $R_b$  which represent an *ortho*-quinone moiety (-(C=O)-(C=O)-), *ortho*-catechol (-(C-OH)-(C-OH)-) or *ortho*-catechol pro-drug moiety (-(C-O-Prodrug moiety)-(C-O-Prodrug moiety)-); and the remaining carbons of Ring B are optionally substituted with one to five substituents selected from
  - a) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
  - b) a halogen or trihaloalkyl;
  - c) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy; or
  - d) an OH, or a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> primary, secondary, or tertiary alcohol;

- e) nitro; and
- Bridge X is an alkene (-CR<sub>9</sub>=CR<sub>10</sub>-), wherein R<sub>9</sub> and R<sub>10</sub> are alternatively H, alkyl, amino, amido, cyano, hydroxyl, or carboxyl;

provided that said compound is not combretastatin A1 or a salt, ester, or prodrug thereof.

# Claims 5 - 9 CANCELED

10. (currently amended) A compound comprising a quinone, quinone prodrug, or a pharmaceutically acceptable salt form thereof having one of the following general structures:

$$R_3$$
 $R_4$ 
 $R_5$ 
 $R_6$ 
 $R_7$ 
 $R_8$ 
 $R_8$ 
 $R_8$ 
 $R_8$ 

lla:

or

HO 
$$R_8$$
  $R_7$   $R_5$   $R_4$   $R_2$   $R_3$   $R_6$   $R_7$   $R_7$   $R_8$   $R_7$   $R_8$   $R_8$   $R_8$ 

IIb:

#### wherein:

- a. at least one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> or and R<sub>8</sub> are the same or different and are selected from:
  - i) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;

- ii) a halogen or trihaloalkyl;
- iii) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy; <u>or</u>
- iv) an OH, or a  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_4$  or  $C_5$  primary, secondary, or tertiary alcohol; or and the remaining  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ , or  $R_8$  are H; and
- b. X is an alkene (-CR<sub>9</sub>=CR<sub>10</sub>-), wherein R<sub>9</sub> and R<sub>10</sub> are alternatively H, alkyl, amino, amido, cyano, hydroxyl, or carboxyl

provided that said compound is not combretastatin A1 or a salt, ester, or prodrug thereof.

- 11. (canceled)
- 12. (currently amended) The compound of claim 44 10, wherein X is an ethylene group (-CH=CH-), and Rings A and B are in a cis (Z) isomeric configuration.
- 13. (original) The compound of claim 12, wherein  $R_2$ ,  $R_3$  and  $R_4$  are methoxy.
- 14. (previously presented) The compound of claim 13, wherein R<sub>8</sub> is selected from:
  - i) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
  - ii) a halogen or trihaloalkyl;
  - iii) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
  - iv) an OH, or a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> primary, secondary, or tertiary alcohol; or
  - v) nitro:

and the remaining  $R_1$ ,  $R_5$ ,  $R_6$ , and  $R_7$  are H.

- 15. (original) The compound of claim 14, wherein R<sub>8</sub> is OH or –O-CH<sub>2</sub>-CH=CH<sub>2</sub>.
- 16. (original) The compound of claim 4, wherein said catechol is a biooxidative agent which is oxidatively activated *in vivo* to form a quinone capable of participating in a redox cycling reaction to form one or more Reactive Oxygen Species ("ROS").

# Claims 17-33 CANCELED

34. (currently amended) A composition of the following formula (V):

$$R_8$$
 $R_5$ 
 $R_5$ 
 $R_2$ 
 $R_7$ 
 $R_6$ 
 $R_4$ 
 $R_3$ 
 $R_3$ 
 $R_4$ 

# wherein

- a. Z is an ethylene (-CH=CH-) bridge in the cis (Z) isomeric configuration;
- b. R<sub>1</sub> and R<sub>2</sub> are OH or a prodrug form thereof;
- c. at least one of  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are optionally the same or different and selected from
  - i) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
  - ii) a halogen or trihaloalkyl;
  - iii) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy; or
  - iv) an OH, or a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> primary, secondary, or tertiary alcohol;
  - v) nitro; and

the remaining R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are hydrogen, provided that said compound is not combretastatin A1 or prodrug thereof.

- 35. (original) The composition of claim 34, wherein at least three of  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are not hydrogen.
- 36. (original) The composition of claim 35, wherein R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> are the same.
- 37. (original) The composition of claim 36, wherein  $R_6$ ,  $R_7$  and  $R_8$  are methoxy.

- 38. (currently amended) The composition of claim 37, wherein R<sub>3</sub> is
  - i) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
  - ii) a halogen or trihaloalkyl;
  - iii) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
  - iv) an OH, or a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> primary, secondary, or tertiary alcohol; or
  - vi v) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle; and
- R<sub>4</sub>, R<sub>5</sub>, and R<sub>9</sub> are hydrogen.
- 39. (previously presented) The composition of claim 38, wherein R<sub>3</sub> is –CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>, -OCH<sub>2</sub>CH<sub>3</sub>, -F, -Br, -CF<sub>3</sub>, -CBr<sub>3</sub>, -OH, -O-CH<sub>2</sub>-CH=CH<sub>2</sub>, -CH<sub>2</sub>-CH=CH<sub>2</sub>, -NO<sub>2</sub>, -cyano, or -carboxy.
- 40. (original) The composition of claim 39, wherein R<sub>6</sub>, R<sub>7</sub>, and R<sub>8</sub> are F.
- 41. (currently amended) The composition of claim 40, wherein  $R_3$  is
  - i) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight-chain lower alkoxy, cycloalkoxy, heterocycloalkoxy, aryloxy, or lower alkanoyloxy;
  - ii) a halogen or trihaloalkyl;
  - iii) a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> branched or straight chain lower alkyl, allyl, allyloxy, vinyl, or vinyloxy;
  - iv) an OH, or a C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub> or C<sub>5</sub> primary, secondary, or tertiary alcohol;
  - vi v) oxo, lower alkanoyl, thio, sulfonyl, sulfonamide, nitro, nitrosyl, cyano, carboxy, carbamyl, aryl, or heterocycle; and
- R<sub>4</sub>, R<sub>5</sub>, and R<sub>9</sub> are hydrogen.
- 42. (previously presented) The composition of claim 41, wherein R<sub>3</sub> is –CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>, -OCH<sub>2</sub>CH<sub>3</sub>, -F, -Br, -CF<sub>3</sub>, -CBr<sub>3</sub>, -OH, -O-CH<sub>2</sub>-CH=CH<sub>2</sub>, -CH<sub>2</sub>-CH=CH<sub>2</sub>, -NO<sub>2</sub>, -cyano, -carboxy, or –benzyl.

# Claims 43-56 CANCELED

- 57. (original) A composition selected from the group consisting of
- 6-[(Z)-2-(3,4,5-Trimethoxyphenyl) vinyl]-1,2-dihydroxybenzene,
- 3-Ethyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
- 3-Methyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
- 4-Bromo-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
- 4-Phenyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
- 3-Allyl-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
- 4-Fluoro-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-1,2-dihydroxybenzene,
- 2,3,4-Trihydroxy-6-[(Z)-2(3,4,5-trimethoxyphenyl)vinyl]-benzene,
- 2,3-Dihydroxy-4-ethoxy-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-benzene,
- 2,3-Dihydroxy-4-allyloxy-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-benzene,
- 4-Nitro-6-[(Z)-2-(3,4,5-trimethoxyphenyl)vinyl]-2,3-dihydroxybenzene,
- 2',3'dihydroxy -3,5 dichloro4,4'-dimethoxy-(Z)-stilbene,
- 2',3' dihydroxy-4'-methoxy-3,4,5-trifluoro-(Z)-stilbene,
- 2,3-Dihydroxy-4-methoxy-[(Z)-2-(3,4,5-trimethoxyphenyl) Beta-lactam]-benzene,
- 2',3' diphosphate-3,4,5-trimethoxy-(Z)-stilbene, tetrasodium salt;
- 3',4' diphosphate-3,4,5-trimethoxy-(Z)-stilbene, tetrasodium salt; and combinations thereof.
- 58.(previously presented) The compound of claim 4, wherein X is an ethylene group (-CH=CH-), and Rings A and B are in a cis (Z) isomeric configuration